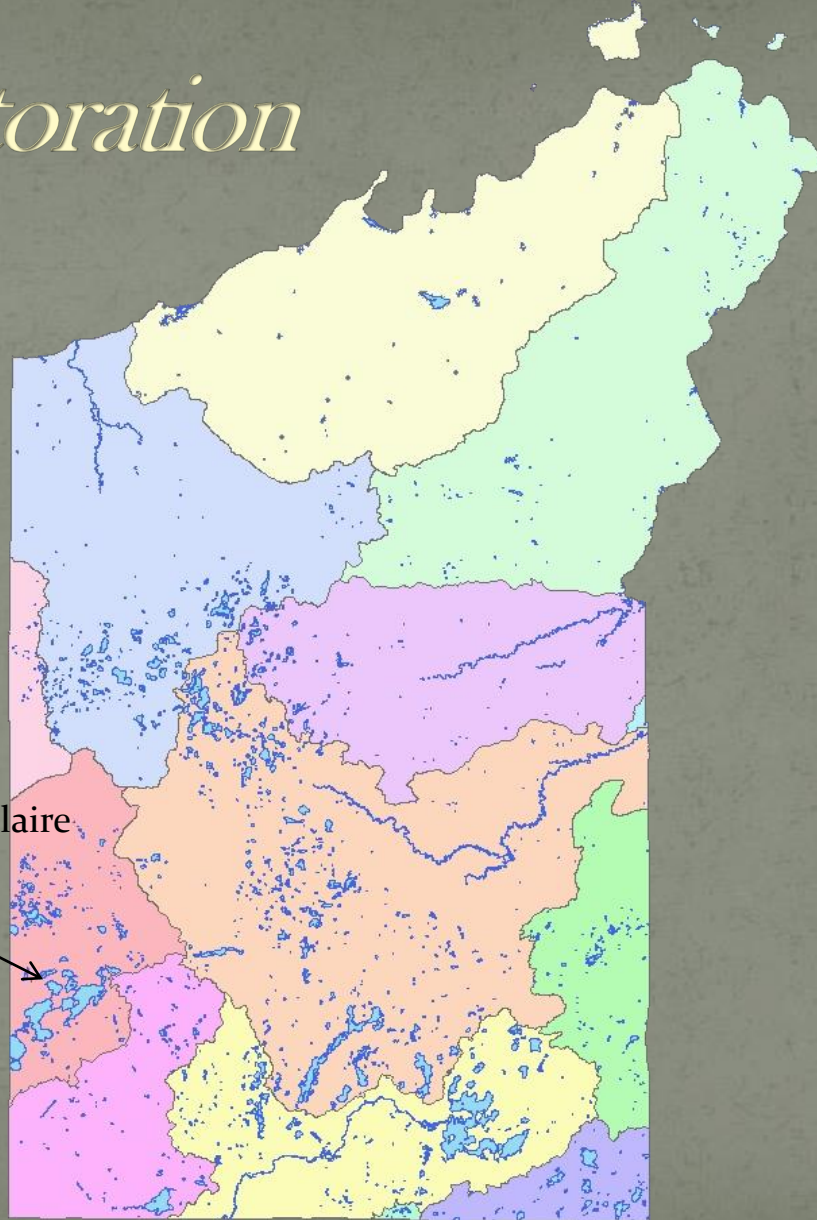


# *Bony Lake – Lakewide Restoration*

Upper St. Croix & Eau Claire  
Rivers Watershed

Bony Lake



# *Bony Lake DNR Lake Protection - Grant Awarded July 2007*

## Project Partners:

- Bony Lake Residents-Grant Oversight Committee
- WI DNR
- Bayfield County LWCD
- Sigurd Olson Environmental Institute-Northland College
- Eau Claire Lakes Conservation Club
- Private Consulting Firms & Local Businesses
- Bayfield County Lakes Forum
- Wisconsin Lakes
- University of Wisconsin Extension





# *Bony Lake*

## Lake Facts

- 191-acre spring fed, drainage lake
- Secchi readings 15'-24'
- 48 Property Owners
- Lakeshore is fully developed
- No public access other than navigable outlet channel





# *Cooperative Effort*

## Project Structure/Partners Role

- Bony Lake-GOC (8 residents of the lake): Grant manager, point-of-contact, project updates, website, I & E
- Bayfield County LWCD: fiscal agent, technical work, project oversight, I & E
- WI DNR- Project support: tree drops, critical habitat designation & permitting
- SOEI- monitoring & student labor
- Private businesses- logging, landscaping, nurseries, etc.





# *Project Goals & Objectives*

1. Restore or conserve a minimum of 50% of the shoreland habitat of Bony Lake
2. Improve the littoral zone habitat
3. Demonstrate the ecological benefits of shoreline restoration and conservation on targeted wildlife species
4. Develop an understanding of the history of the lake



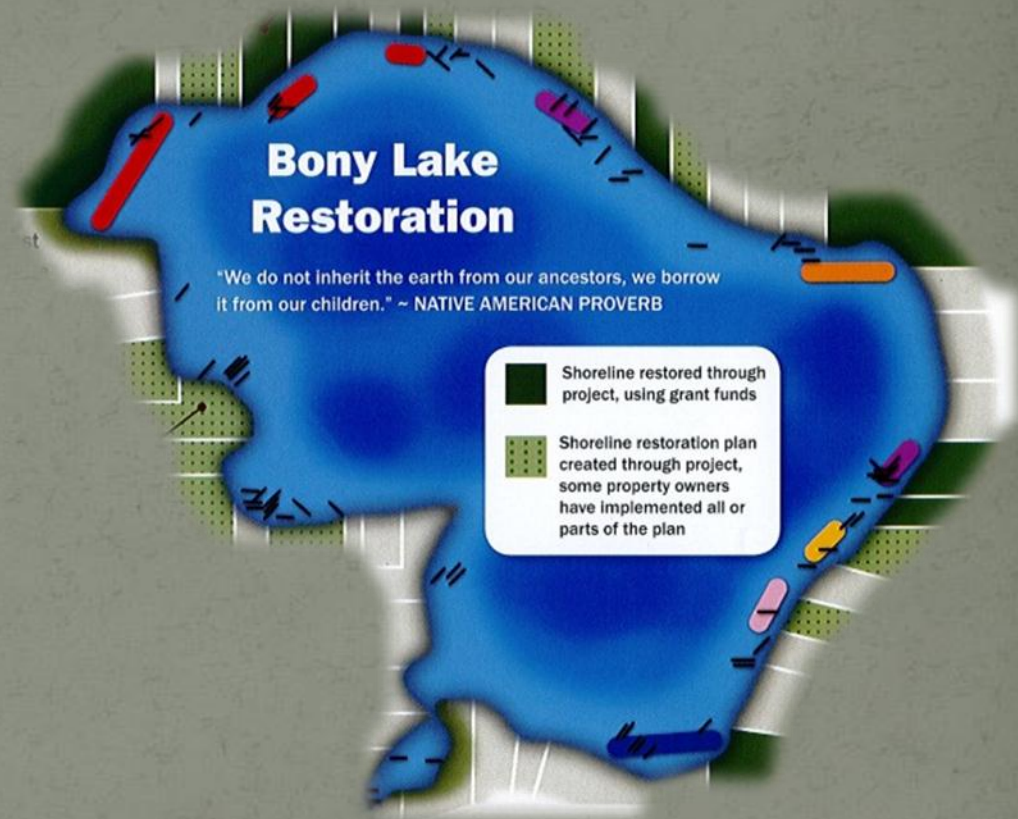
# Project Goal 1:

Restore or conserve a minimum of 50% of the shoreland habitat

- Met w/24 property owners to evaluate and develop a shoreline restoration plan
- 10 shoreline restorations have been completed and signed covenant, approx. 2,585' of shoreline
- 14 properties received consultation, restoration plan and implementing on their own

## Challenges:

- ✓ *Signing a Conservation Covenant*
- ✓ *Other expenses not covered by grant*







## More than just shoreline restoration

Stormwater management & erosion control

- Erosion blanket, temporary seed mixes, etc.
- Rain gutters, infiltration pits, berms and rain gardens
- Driveway diversions, water bars, broad-based dips, grading and shaping



# *Restoration Challenges*

- Control of Terrestrial Invasives
- Routine Watering
- Shoreline Characteristics - (steep slopes, turf grass, etc.)
- Confining activities to view/access corridors - (dock & boat storage, fire rings, stairway/paths, etc.)





# *Project Example*





# *Project Example*



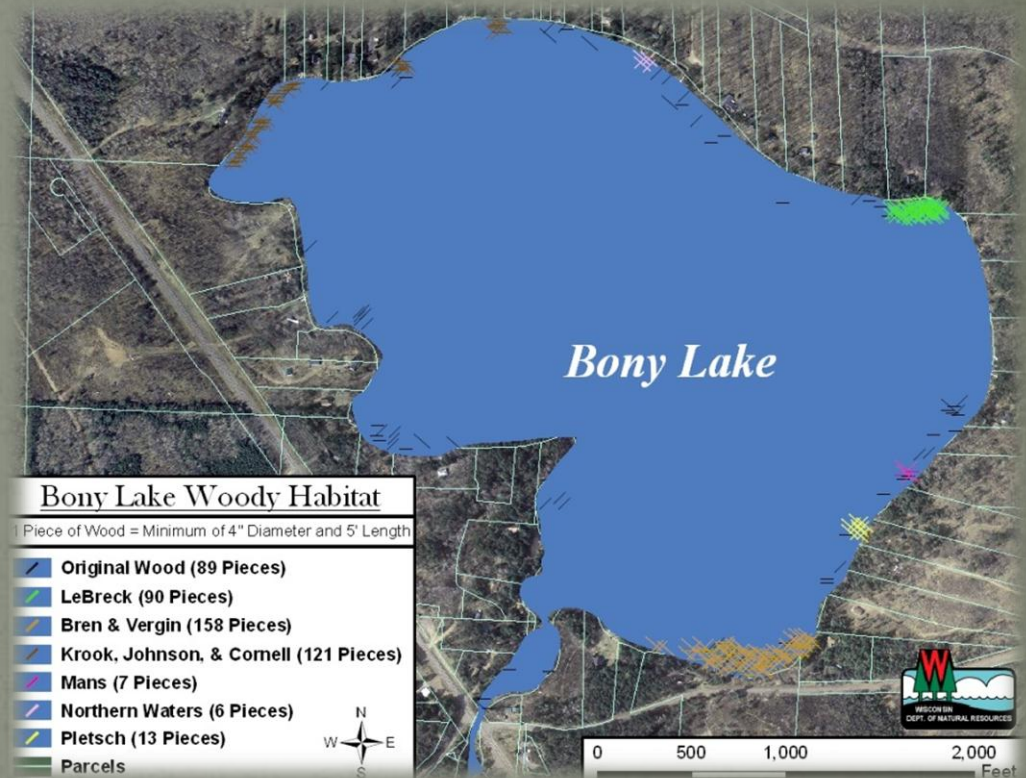


# Project Goal 2:

## Improve the Littoral Zone Habitat

### Installation of Woody Habitat

- 10 property owners have had tree drops installed along portions of their shoreline
- Totalling approximately 400 trees (5 times the original amount)



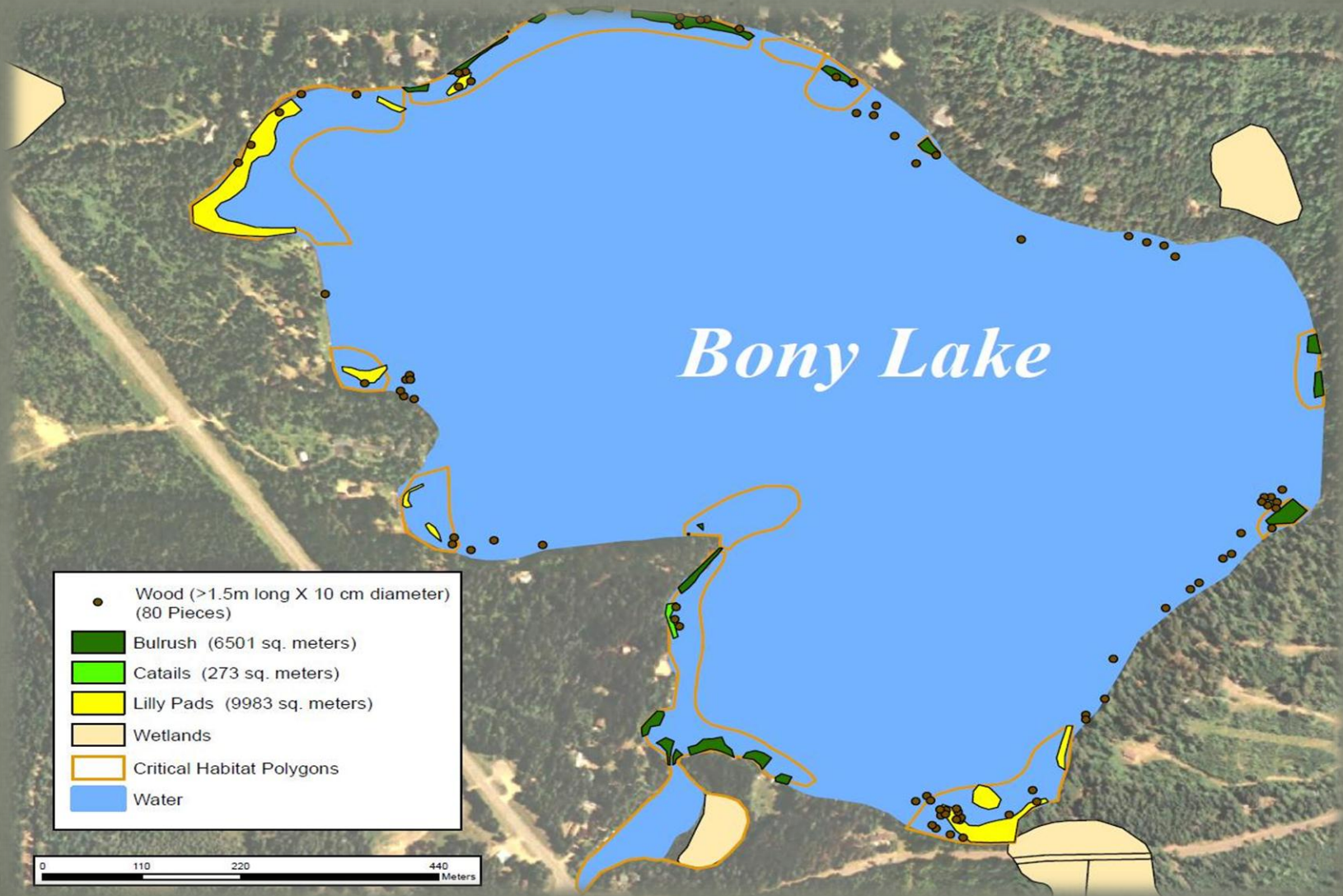


# *Coarse Woody Habitat (Summer/Winter)*





# *Critical Habitat Designations*





# Project Goals 3 & 4:

Demonstrating ecological benefits of shoreline restoration and understanding the history of the lake

- Paleolimnological Sediment Core - (Paul Garrison, DNR Limnologist)
- Monitor changes in the numbers and diversity of frogs, birds and macro-invertebrates
- Educational opportunities - Bony Lake website, presentations, school groups, *Conserve & Restore* brochure, Pontoon Classroom, etc.





# *Bony Lake*

## Accomplishments

- Shoreline Restoration Plans and/or meeting with 24 property owners
- Over 2,500 feet of shoreline under Conservation Covenant
- 10 shoreline restoration projects completed
- 9 clusters of coarse woody habitat, totaling 400 trees along 10 property owner's shoreline
- Bony Lake website:  
[www.bonylakewi.org](http://www.bonylakewi.org)
- Educational Workshops and Awareness: Pontoon classroom, Drummond School ECO day, *Conserve & Restore* brochure

## Challenges

- Staff turnover and time
- Monitoring targeted species
- Scheduling site visits (mainly weekend / summer residents)
- Conservation Covenant (protecting the shoreline & project in perpetuity)
- Administrative: tracking volunteer hours (match/in-kind)
- Permitting



# *Permitting*

## **Contact WI DNR – Water Mgmt Specialist**

- Individual Permit vs. General Permit
- DNR may not allow or permit tree drops
- Pumping from the lake for watering new plantings

## **Contact Local Zoning Depart**

- Shoreland Grading Permit
- Stairway to the Lake Permit
- Shoreland Buffer Standards



# *Contact Information*

Carol LeBreck

- E-mail: [carol.k.lebreck@uwrf.edu](mailto:carol.k.lebreck@uwrf.edu)
- Phone # (715) 425-6904

Travis Tulowitzky

- E-mail: [ttulowitzky@bayfieldcounty.org](mailto:ttulowitzky@bayfieldcounty.org)
- Phone # (715) 373-6167